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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/936,460	01/08/2002	Hartwig Schwier	P01,0299	4135
26574	7590	08/24/2006	EXAMINER	
SCHIFF HARDIN, LLP PATENT DEPARTMENT 6600 SEARS TOWER CHICAGO, IL 60606-6473				MILIA, MARK R
		ART UNIT		PAPER NUMBER
		2625		

DATE MAILED: 08/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/936,460	SCHWIER ET AL.
Examiner	Art Unit	
Mark R. Milia	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 06 June 2006.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 22-48 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5)  Claim(s) \_\_\_\_\_ is/are allowed.  
6)  Claim(s) 22-48 is/are rejected.  
7)  Claim(s) \_\_\_\_\_ is/are objected to.  
8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 06 June 2006 is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
    Paper No(s)/Mail Date \_\_\_\_\_

4)  Interview Summary (PTO-413)  
    Paper No(s)/Mail Date. \_\_\_\_\_ .

5)  Notice of Informal Patent Application (PTO-152)

6)  Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/6/06 has been entered. Currently, claims 22-48 are pending.

### ***Drawings***

2. The drawings were received on 6/6/06. These drawings are accepted. The objection to Fig. 9, as cited in the previous Office Action, has been withdrawn.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 46-48 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S.

Patent No. 5982996 to Snyders.

Regarding claim 46, Snyders discloses a method for printing a document, comprising the steps of: outputting a document file for printing from an application running in a Windows or windows-like environment (see Fig. 1, column 3 lines 38-62, column 4 lines 8-13, and column 6 lines 22-25), calling a print driver for the document file, said driver outputting the document file in EMF format, said driver being operable to always output documents in EMF format (see column 8 lines 9-35), transmitting the document file in EMF format to a spool file (see column 6 line 60-column 7 line 15 and column 9 lines 1-4), spooling the EMF format document file to a print processor (see column 7 lines 3-15, column 8 lines 14-35, and column 9 lines 5-6), transmitting the document file from the print processor to a converter for conversion from EMF format to a raw printer format (see column 9 lines 15-53), receiving a user input at a user interface (see column 8 lines 9-14 and 40-42), controlling the conversion from EMF format to the raw printer format according to the user input (see column 8 lines 9-43), outputting the document file in raw printer format to an output device (see column 3 lines 38-49, column 9 lines 50-53, and column 11 lines 32-37).

Regarding claim 47, Snyders further discloses wherein said raw printer format is PCL format (see column 8 lines 3-6 and column 10 lines 20-21).

Regarding claim 48, Snyders further discloses wherein said output device includes a port monitor and a printer device connected to the port monitor (see Fig. 5 and column 9 lines 18-20).

***Claim Rejections - 35 USC § 103***

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 22-31, 33-39, and 43-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5983243 to Heiney et al. in view of U.S. Patent No. 5982996 to Snyders.

Regarding claim 22, Heiney discloses a method for transmission of data from a computer system that is operated with a Windows or windows-like operating system to an output device, comprising the steps of: generating a master document (see Fig. 3 and column 4 lines 21-67), logically linking a plurality of auxiliary documents with the master document by forming reference indices (see Fig. 3 and column 5 lines 12-20 and 38-49), sending the data of the auxiliary documents to the output device separated from data of the master document (see Fig. 3 and column 3 line 56-column 4 line 10), joining the data of the auxiliary documents with the data of the master document in the output device upon employment of the reference indices (see Fig. 3 and column 5 lines 57-61), generating a print job from an application program running on a computer system that is operated with a Windows or windows-like operating system, (see Fig. 3 and column 5

lines 63-64) said step of generating including: calling a printer driver first (see column 3 lines 61-66, reference states that the raster image processor translates the PDL document into printable dot patterns which is analogous to the function of a printer driver), setting settings of the appertaining printer supported by the called printer driver job-specifically (see column 4 lines 4-10 and 39-41), and enabling the print job, as a result whereof the data of at least one of the master document and of the auxiliary documents are generated (see Fig. 3 and column 5 lines 63-64).

Heiney does not disclose expressly generating a data stream in an enhanced metafile format, calling a converter unit by a print processor, said converter converting said enhanced metafile format into a print data format, controlling a conversion by said converter by predetermined parameters input via an input module, carrying out a check in a check step to see whether the respectively generated output format corresponds to a standard prescribed by the operating system, supplying the data, when there is correspondence, to a print processor located in a spooler and, when non-correspondence is found in the check step, are converted by an operating system-specific converter unit into an intermediate data stream that is further-processed via various output channels.

Snyders discloses generating a data stream in an enhanced metafile format (see column 10 lines 21-23, 45-46, and 56-63), calling a converter unit by a print processor, said converter converting said enhanced metafile format into a print data format (see column 9 lines 15-27 and 50-53, and column 10 line 15-column 11 lines 37), controlling a conversion by said converter by predetermined parameters input via an input module

(see Fig. 1 and column 9 lines 28-31 and 38-43), carrying out a check in a check step to see whether the respectively generated output format corresponds to a standard prescribed by the operating system (see column 7 lines 42-45 and column 8 lines 4-9) and supplying the data, when there is correspondence, to a print processor located in a spooler and, when non-correspondence is found in the check step, are converted by an operating system-specific converter unit into an intermediate data stream that is further-processed via various output channels (see column 6 line 60-column 7 line 15, column 7 lines 39-41, and column 8 lines 3-9, 14-35, and 51-54).

Regarding claims 43 and 44, Heiney discloses a method and computer program on a computer readable medium for transmission of data from a computer system that is operated with a Windows or windows-like operating system to an output device, comprising the steps of: generating a master document (see Fig. 3 and column 4 lines 21-67), logically linking a plurality of auxiliary documents with the master document by forming reference indices (see Fig. 3 and column 5 lines 12-20 and 38-49), sending the data of the auxiliary documents to the output device separated from data of the master document (see Fig. 3 and column 3 line 56-column 4 line 10), joining the data of the auxiliary documents with the data of the master document in the output device upon employment of the reference indices (see Fig. 3 and column 5 lines 57-61), generating a print job from an application program (see Fig. 3 and column 5 lines 63-64) including: calling a printer driver first (see column 3 lines 61-66, reference states that the raster image processor translates the PDL document into printable dot patterns which is analogous to the function of a printer driver), setting settings of the appertaining printer

supported by the called printer driver job-specifically (see column 4 lines 4-10 and 39-41), and enabling the print job, as a result whereof the data of at least one of the master document and of the auxiliary documents are generated (see Fig. 3 and column 5 lines 63-64).

Heiney does not disclose expressly carrying out a check in a check step to see whether the respectively generated output format corresponds to a standard prescribed by the operating system, supplying the data, when there is correspondence, to a print processor located in a spooler and, when non-correspondence is found in the check step, are converted by an operating system-specific converter unit into an intermediate data stream that is further-processed via various output channels.

Snyders discloses carrying out a check in a check step to see whether the respectively generated output format corresponds to a standard prescribed by the operating system (see column 7 lines 42-45 and column 8 lines 4-9) and supplying the data, when there is correspondence, to a print processor located in a spooler and, when non-correspondence is found in the check step, are converted by an operating system-specific converter unit into an intermediate data stream that is further-processed via various output channels (see column 6 line 60-column 7 line 15, column 7 lines 39-41, and column 8 lines 3-9, 14-35, and 51-54).

Regarding claim 45, Heiney discloses a method for transmission of data from a computer system that is operated with a Windows or windows-like operating system to an output device, comprising the steps of: generating a master document (see Fig. 3 and column 4 lines 21-67), logically linking a plurality of auxiliary documents with the

master document by forming reference indices (see Fig. 3 and column 5 lines 12-20 and 38-49), sending the data of the auxiliary documents to the output device separated from data of the master document (see Fig. 3 and column 3 line 56-column 4 line 10), joining the data of the auxiliary documents with the data of the master document in the output device upon employment of the reference indices (see Fig. 3 and column 5 lines 57-61), generating a print job from an application program (see Fig. 3 and column 5 lines 63-64) including: calling a printer driver first (see column 3 lines 61-66, reference states that the raster image processor translates the PDL document into printable dot patterns which is analogous to the function of a printer driver), setting settings of the appertaining printer supported by the called printer driver job-specifically (see column 4 lines 4-10 and 39-41), and enabling the print job, as a result whereof the data of at least one of the master document and of the auxiliary documents are generated (see Fig. 3 and column 5 lines 63-64).

Heiney does not disclose expressly generating a data stream in an enhanced metafile format, calling a converter unit by a print processor, said converter converting said enhanced metafile format into a print data format, controlling a conversion by said converter by predetermined parameters input via an input module, carrying out a check in a check step to see whether the respectively generated output format corresponds to a standard prescribed by the operating system, supplying the data, when there is correspondence, to a print processor located in a spooler.

Snyders discloses generating a data stream in an enhanced metafile format (see column 10 lines 21-23, 45-46, and 56-63), calling a converter unit by a print processor,

said converter converting said enhanced metafile format into a print data format (see column 9 lines 15-27 and 50-53, and column 10 line 15-column 11 lines 37), controlling a conversion by said converter by predetermined parameters input via an input module (see Fig. 1 and column 9 lines 28-31 and 38-43), carrying out a check in a check step to see whether the respectively generated output format corresponds to a standard prescribed by the operating system (see column 7 lines 42-45 and column 8 lines 4-9) and supplying the data, when there is correspondence, to a print processor located in a spooler (see column 6 line 60-column 7 line 15, column 7 lines 39-41, column 8 lines 3-9, 14-35, and 51-54, column 9 lines 15-43, and column 10 line 15-column 11 line 37).

Heiney & Snyders are combinable because they are from the same field of endeavor, formatting document data for subsequent printing.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the printer driver switching to allow distribution of print jobs to an output device of Snyders with the system of Heiney.

The suggestion/motivation for doing so would have been to allow a plurality of different types of printers to output the same document data that is created by a user at a personal computer or workstation regardless of the format of the data in which the printer is capable of handling.

Therefore, it would have been obvious to combine Snyders with Heiney to obtain the invention as specified in claims 22 and 43-45.

Regarding claim 23, Heiney further discloses storing the data of the auxiliary documents in the output device (see column 3 line 66-column 4 line 10, reference shows the storage of documents being located in a print server that is attached to the printer).

Regarding claim 24, Heiney further discloses joining the data of the master document with the data of the auxiliary documents for output of individual documents (see column 5 lines 52-65).

Regarding claim 25, Heiney further discloses attaching the auxiliary documents to at least one arbitrary regions of the first document at a beginning of the output (see column 5 lines 10-21).

Regarding claim 26, Heiney further discloses controlling the referencing in a windows systems environment or in a windows-like system environment via data that are input via a user interface (see Figs. 1 and 2, column 3 lines 25-43, and column 4 lines 21-34).

Regarding claim 27, Heiney further discloses whereby the referencing ensues in a converter unit that converts an enhanced metafile data stream into a print data stream of a printer language (see column 4 line 55-column 5 line 29).

Regarding claim 28, Snyders further discloses whereby the converter unit collaborates with a print processor and a port monitor of a spooler (see column 8 lines 59-67 and column 9 lines 18-27).

Regarding claim 29, Heiney further discloses specifying an area of the master document wherein a respective auxiliary document is linked with the master document (see column 5 lines 37-49).

Regarding claim 30, Heiney further discloses wherein said specifying step specifies a page region (see column 5 lines 37-49).

Regarding claim 31, Heiney further discloses indicating whether an auxiliary document is one of an overlay and a watermark document (see column 5 lines 37-49, reference states that a bookticket is created that instructs the collator how to merge the variable data with the fixed data form and one way in which that is accomplished is by overlaying the variable data onto the fixed data, the reference also states this in claim 14, therefore the reference teaches overlaying variable data).

Regarding claim 33, Heiney further discloses wherein said output device is a printer device (see Figs. 1 and 3, column 4 lines 1-10, and column 5 lines 63-64).

Regarding claim 34, Heiney further discloses transmitting an auxiliary document to the output device in the PCL print data language (see column 4 lines 37-39, reference states the use of a PostScript or other similar PDL, of which PCL is a part of).

Regarding claim 35, Heiney further discloses transmitting an auxiliary document to the output device in the Postscript print data language (see column 4 lines 37-39).

Regarding claim 36, Heiney further discloses transmitting an auxiliary document to the output device in the IPDS print data language (see column 4 lines 37-39, reference states the use of a PostScript or other similar PDL, of which IPDS is a part of).

Regarding claim 37, Heiney further discloses transmitting an auxiliary document to the output device in the LCDS print data language (see column 4 lines 37-39, reference states the use of a PostScript or other similar PDL, of which LCDS is a part of).

Regarding claim 38, Heiney further discloses wherein at least one of said plurality of auxiliary documents contains graphics information (see column 4 lines 39-41).

Regarding claim 39, Heiney further discloses wherein said graphics information is one of an image datafile and a diagram (see column 4 lines 39-41).

7. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Heiney and Snyders as applied to claim 22 above, and further in view of U.S. Patent No. 6473892 to Porter.

Heiney and Snyders do not disclose expressly wherein at least one of said plurality of auxiliary documents is a macro datafile.

Porter discloses wherein an auxiliary document is a macro datafile (see Fig. 2 and column 8 line 46-column 9 line 13).

Heiney, Snyders, & Porter are combinable because they are from the same field of endeavor, formatting document data for subsequent printing.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the macro datafile as described by Porter with the system of Heiney and Snyders.

The suggestion/motivation for doing so would have been to provide greater flexibility and create more options as a macro can contain a plurality of objects and properties that can be made of use in the merging of data.

Therefore, it would have been obvious to combine Porter with Heiney and Snyders to obtain the invention as specified in claim 32.

8. Claims 40-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uematsu in view of Heiney (US 5983243) and U.S. Patent No. 5742879 to Altrieth III.

Regarding claim 40 discloses Uematsu discloses a method for transmission of data from a computer system to an output device, comprising the steps of: providing a master document having a variable data area and a static data area (see Figs. 1 and 4 and column 5 lines 10-16), inserting variable data into the variable data area, as a result whereof a serial data stream with individual documents having variable data and static data arises (see Fig.1 and column 6 lines 7-67), transmitting the variable data separated from the static data from the first individual document to the output device (see Fig. 1A and column 6 lines 41-63), storing the static data of the first individual document in the output device (see Fig. 3 and column 5 lines 3-19), the static data of following individual documents are not transmitted to the output device (see Fig. 1 and column 9 lines 6-31), and joining the variable data in turn with the stored static data individual document by individual document in the output device, wherein said steps of storing and joining are performed within an output device (see Fig.1 and 10 and column 9 lines 6-31).

Uematsu does not disclose expressly marking the variable data area, wherein said step of providing the master document and said step of marking and said step of inserting variable data are performed within a computer system, and separating the variable data from the serial data stream from the static data on a basis of the marking.

Heiney discloses wherein said step of providing the master document and said step of marking and said step of inserting variable data are performed within a computer system (see Fig. 3, column 4 lines 20-67, and column 5 lines 5-29) and separating the variable data from the serial data stream from the static data (see Fig. 3, column 3 line 56-column 4 line 10, and column 5 lines 12-20 and 37-49).

Altrieth discloses marking the variable data area (see Figs. 1A-D, column 5 lines 9-20, and column 9 lines 34-38).

Uematsu, Heiney, & Altrieth are combinable because they are from the same field of endeavor, printing having static and variable data.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the marking of the variable data are as described by Altrieth and the processing of the master document within a computer system as described by Heiney with the system of Uematsu.

The suggestion/motivation for doing so would have been to clearly locate variable data areas and increase printing speed and efficiency by allowing a computer system to process most of the document.

Therefore, it would have been obvious to combine Heiney and Altrieth with Uematsu to obtain the invention as specified in claim 40.

Regarding claim 41, Altrieth further discloses wherein said marking step of the variable data region ensues by a visually perceptible identification (see Figs. 1A-D, column 5 lines 12-20, and column 9 lines 34-38).

9. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Uematsu, Heiney, and Altrieth in view of U.S. Patent No. 5649024 to Goldsmith.

Uematsu, Heiney, and Altrieth do not disclose expressly wherein said marking step of the variable data region ensues chromatically.

Goldsmith discloses wherein said marking step of the variable data region ensues chromatically (see column 6 lines 51-57 and column 7 lines 24-35, 48-52, and 61-67).

Uematsu, Heiney, Altrieth, & Goldsmith are combinable because they are from the same field of endeavor, merging and manipulation of document data.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the color highlighting of originally black text as described by Goldsmith with the system of Uematsu, Heiney, and Altrieth.

The suggestion/motivation for doing so would have been to allow desired text to stand out in a document that has been created from merging text or graphic data with a master document.

Therefore, it would have been obvious to combine Goldsmith with Uematsu, Heiney, and Altrieth to obtain the invention as specified in claim 42.

### ***Conclusion***

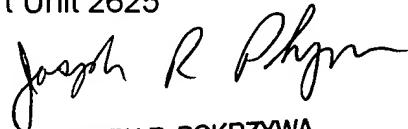
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark R. Milia whose telephone number is (571) 272-7408. The examiner can normally be reached M-F 8:00am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler M. Lamb can be reached at (571) 272-7406. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Mark R. Milia  
Examiner  
Art Unit 2625

MRM



JOSEPH R. POKRZYWA  
PRIMARY EXAMINER